PCT

RE-RUN

RAW SEQUENCE LISTING   DATE: 09/13/2004
PATENT APPLICATION: US/10/010,000   TIME: 10:11:15

Input Set : A:\PF-0712-USN SEQUENCE LISTINGS.txt
Output Set: N:\CRF4\09132004\J010000.raw

```
    2 <110> APPLICANT: INCYTE GENOMICS, INC.
    3        BANDMAN, Olga
    4        YUE, Henry
    5        LAL, Preeti
    6        TANG, Y. Tom
    7        REDDY, Roopa
    8        BAUGHN, Mariah R.
    9        AZIMZAI, Yalda
W--> 10 <120> TITLE OF INVENTION: RNA METABOLISM PROTEINS
W--> 11 <130> FILE REFERENCE: PF-0712 PCT
W--> 12 <140> CURRENT APPLICATION NUMBER: To Be Assigned
C--> 13 <141> CURRENT FILING DATE: 2001-12-05
    14 <150> PRIOR APPLICATION NUMBER: 60/139,922
    15 <151> PRIOR FILING DATE: 1999-06-17
W--> 16 <160> NUMBER OF SEQ ID: 26
    17 <170> SOFTWARE: PERL Program
W--> 18 <210> SEQ ID NO: 1
    19 <211> LENGTH: 503
    20 <212> TYPE: PRT
    21 <213> ORGANISM: Homo sapiens
W--> 22 <220> FEATURE:
    23 <221> NAME/KEY: misc_feature
    24 <223> OTHER INFORMATION: Incyte Clone No: 046926
W--> 25 <400> SEQUENCE: 1
    26 Met Glu Tyr Met Ala Glu Ser Thr Asp Arg Ser Pro Gly His Ile
    27  1               5                  10                  15
    28 Leu Cys Cys Glu Cys Gly Val Pro Ile Ser Pro Asn Pro Ala Asn
    29              20                  25                  30
    30 Ile Cys Val Ala Cys Leu Arg Ser Lys Val Asp Ile Ser Gln Gly
    31              35                  40                  45
    32 Ile Pro Lys Gln Val Ser Ile Ser Phe Cys Lys Gln Cys Gln Arg
    33              50                  55                  60
    34 Tyr Phe Gln Pro Pro Gly Thr Trp Ile Gln Cys Ala Leu Glu Ser
    35              65                  70                  75
    36 Arg Glu Leu Leu Ala Leu Cys Leu Lys Lys Ile Lys Ala Pro Leu
    37              80                  85                  90
    38 Ser Lys Val Arg Leu Val Asp Ala Gly Phe Val Trp Thr Glu Pro
    39              95                  100                 105
    40 His Ser Lys Arg Leu Lys Val Lys Leu Thr Ile Gln Lys Glu Val
    41              110                 115                 120
    42 Met Asn Gly Ala Ile Leu Gln Gln Val Phe Val Val Asp Tyr Val
    43              125                 130                 135
    44 Val Gln Ser Gln Met Cys Gly Asp Cys His Arg Val Glu Ala Lys
```

BEST AVAILABLE COPY

RAW SEQUENCE LISTING   DATE: 09/13/2004
PATENT APPLICATION: US/10/010,000   TIME: 10:11:15

Input Set : A:\PF-0712-USN SEQUENCE LISTINGS.txt
Output Set: N:\CRF4\09132004\J010000.raw

```
45                    140                   145                   150
46 Asp Phe Trp Lys Ala Val Ile Gln Val Arg Gln Lys Thr Leu His
47                    155                   160                   165
48 Lys Lys Thr Phe Tyr Tyr Leu Glu Gln Leu Ile Leu Lys Tyr Gly
49                    170                   175                   180
50 Met His Gln Asn Thr Leu Arg Ile Lys Glu Ile His Asp Gly Leu
51                    185                   190                   195
52 Asp Phe Tyr Tyr Ser Ser Lys Gln His Ala Gln Lys Met Val Glu
53                    200                   205                   210
54 Phe Leu Gln Cys Thr Val Pro Cys Arg Tyr Lys Ala Ser Gln Arg
55                    215                   220                   225
56 Leu Ile Ser Gln Asp Ile His Ser Asn Thr Tyr Asn Tyr Lys Ser
57                    230                   235                   240
58 Thr Phe Ser Val Glu Ile Val Pro Ile Cys Lys Asp Asn Val Val
59                    245                   250                   255
60 Cys Leu Ser Pro Lys Leu Ala Gln Ser Leu Gly Asn Met Asn Gln
61                    260                   265                   270
62 Ile Cys Val Cys Ile Arg Val Thr Ser Ala Ile His Leu Ile Asp
63                    275                   280                   285
64 Pro Asn Thr Leu Gln Val Ala Asp Ile Asp Gly Ser Thr Phe Trp
65                    290                   295                   300
66 Ser His Pro Phe Asn Ser Leu Cys His Pro Lys Gln Leu Glu Glu
67                    305                   310                   315
68 Phe Ile Val Met Glu Cys Ser Ile Val Gln Asp Ile Lys Arg Ala
69                    320                   325                   330
70 Ala Gly Ala Gly Met Ile Ser Lys Lys His Thr Leu Gly Glu Val
71                    335                   340                   345
72 Trp Val Gln Lys Thr Ser Glu Met Asn Thr Asp Lys Gln Tyr Phe
73                    350                   355                   360
74 Cys Arg Thr His Leu Gly His Leu Leu Asn Pro Gly Asp Leu Val
75                    365                   370                   375
76 Leu Gly Phe Asp Leu Ala Asn Cys Asn Leu Asn Asp Glu His Val
77                    380                   385                   390
78 Asn Lys Met Asn Ser Asp Arg Val Pro Asp Val Val Leu Ile Lys
79                    395                   400                   405
80 Lys Ser Tyr Asp Arg Thr Lys Arg Gln Arg Arg Arg Asn Trp Lys
81                    410                   415                   420
82 Leu Lys Glu Leu Ala Arg Glu Arg Glu Asn Met Asp Thr Asp Asp
83                    425                   430                   435
84 Glu Arg Gln Tyr Gln Asp Phe Leu Glu Asp Leu Glu Glu Asp Glu
85                    440                   445                   450
86 Ala Ile Arg Lys Asn Val Asn Ile Tyr Arg Asp Ser Ala Ile Pro
87                    455                   460                   465
88 Val Glu Ser Asp Thr Asp Asp Glu Gly Ala Pro Arg Ile Ser Leu
89                    470                   475                   480
90 Ala Glu Met Leu Glu Asp Leu His Ile Ser Gln Asp Ala Thr Gly
91                    485                   490                   495
92 Glu Glu Gly Ala Ser Met Leu Thr
93                    500
```

file://C:\CRF4\OUTHOLD\V: J010000.htm   9/13/04

PAGE 3/8 * RCVD AT 9/13/2004 10:30:50 AM [C ...tern Daylight Time] * SVR:USPTC EFXRF-2/2 * DNIS:7466695 * CSID:703 308 4221 * DURATION (mm-ss):03-30

RAW SEQUENCE LISTING   DATE: 09/13/2004
PATENT APPLICATION: US/10/010,000   TIME: 10:11:15

Input Set : A:\PF-0712-USN SEQUENCE LISTINGS.txt
Output Set: N:\CRF4\09132004\J010000.raw

```
 94 <210> SEQ ID NO: 2
 95 <211> LENGTH: 594
 96 <212> TYPE: PRT
 97 <213> ORGANISM: Homo sapiens
W--> 98 <220> FEATURE:
 99 <221> NAME/KEY: misc_feature
100 <223> OTHER INFORMATION: Incyte Clone No: 618791
W--> 101 <400> SEQUENCE: 2
102 Met Ser Ala Gly Glu Val Glu Arg Leu Val Ser Glu Leu Ser Gly
103  1               5                  10                  15
104 Gly Thr Gly Gly Asp Glu Glu Glu Glu Trp Leu Tyr Gly Gly Pro
105                 20                  25                  30
106 Trp Asp Val His Val His Ser Asp Leu Ala Lys Asp Leu Asp Glu
107                 35                  40                  45
108 Asn Glu Val Glu Arg Pro Glu Glu Glu Asn Ala Ser Ala Asn Pro
109                 50                  55                  60
110 Pro Ser Gly Ile Glu Asp Glu Thr Ala Glu Asn Gly Val Pro Lys
111                 65                  70                  75
112 Pro Lys Val Thr Glu Thr Glu Asp Asp Ser Asp Ser Asp Ser Asp
113                 80                  85                  90
114 Asp Asp Glu Asp Asp Val His Val Thr Ile Gly Asp Ile Lys Thr
115                 95                 100                 105
116 Gly Ala Pro Gln Tyr Gly Ser Tyr Gly Thr Ala Pro Val Asn Leu
117                110                 115                 120
118 Asn Ile Lys Thr Gly Gly Arg Val Tyr Gly Thr Thr Gly Thr Lys
119                125                 130                 135
120 Val Lys Gly Val Asp Leu Asp Ala Pro Gly Ser Ile Asn Gly Val
121                140                 145                 150
122 Pro Leu Leu Glu Val Asp Leu Asp Ser Phe Glu Asp Lys Pro Trp
123                155                 160                 165
124 Arg Lys Pro Gly Ala Asp Leu Ser Asp Tyr Phe Asn Tyr Gly Phe
125                170                 175                 180
126 Asn Glu Asp Thr Trp Lys Ala Tyr Cys Glu Lys Gln Lys Arg Ile
127                185                 190                 195
128 Arg Met Gly Leu Glu Val Ile Pro Val Thr Ser Thr Thr Asn Lys
129                200                 205                 210
130 Ile Thr Ala Glu Asp Cys Thr Met Glu Val Thr Pro Gly Ala Glu
131                215                 220                 225
132 Ile Gln Asp Gly Arg Phe Asn Leu Phe Lys Val Gln Gln Gly Arg
133                230                 235                 240
134 Thr Gly Asn Ser Glu Lys Glu Thr Ala Leu Pro Ser Thr Lys Ala
135                245                 250                 255
136 Glu Phe Thr Ser Pro Pro Ser Leu Phe Lys Thr Gly Leu Pro Pro
137                260                 265                 270
138 Ser Arg Asn Ser Thr Ser Ser Gln Ser Gln Thr Ser Thr Ala Ser
139                275                 280                 285
140 Arg Lys Ala Asn Ser Ser Val Gly Lys Trp Gln Asp Arg Tyr Gly
141                290                 295                 300
142 Arg Ala Glu Ser Trp Asp Leu Arg Arg Leu Pro Gly Ala Ile Asp
```

RAW SEQUENCE LISTING   DATE: 09/13/2004
PATENT APPLICATION: US/10/010,000   TIME: 10:11:15

Input Set : A:\PF-0712-USN SEQUENCE LISTINGS.txt
Output Set: N:\CRF4\09132004\J010000.raw

```
143                   305                310                315
144 Val Ile Gly Gln Thr Ile Thr Ile Ser Arg Val Glu Gly Arg Arg
145                   320                325                330
146 Arg Ala Asn Glu Asn Ser Asn Ile Gln Val Leu Ser Glu Arg Ser
147                   335                340                345
148 Ala Thr Glu Val Asp Asn Asn Phe Ser Lys Pro Pro Pro Phe Phe
149                   350                355                360
150 Pro Pro Gly Ala Pro Pro Thr His Leu Pro Pro Pro Pro Phe Leu
151                   365                370                375
152 Pro Pro Pro Pro Thr Val Ser Thr Ala Pro Pro Leu Ile Pro Pro
153                   380                385                390
154 Pro Gly Phe Pro Pro Pro Pro Gly Ala Pro Pro Pro Ser Leu Ile
155                   395                400                405
156 Pro Thr Ile Glu Ser Gly His Ser Ser Gly Tyr Asp Ser Arg Ser
157                   410                415                420
158 Ala Arg Ala Phe Pro Tyr Gly Asn Val Ala Phe Pro His Leu Pro
159                   425                430                435
160 Gly Ser Ala Pro Ser Trp Pro Ser Leu Val Asp Thr Ser Lys Gln
161                   440                445                450
162 Trp Asp Tyr Tyr Ala Arg Arg Glu Lys Asp Arg Asp Arg Glu Arg
163                   455                460                465
164 Asp Arg Asp Arg Glu Arg Asp Arg Asp Asp Arg Glu Arg Glu
165                   470                475                480
166 Arg Thr Arg Glu Arg Glu Arg Glu Arg Asp His Ser Pro Thr Pro
167                   485                490                495
168 Ser Val Phe Asn Ser Asp Glu Glu Arg Tyr Arg Tyr Arg Glu Tyr
169                   500                505                510
170 Ala Glu Arg Gly Tyr Glu Arg His Arg Ala Ser Arg Glu Lys Glu
171                   515                520                525
172 Glu Arg His Arg Glu Arg Arg His Arg Glu Lys Glu Glu Thr Arg
173                   530                535                540
174 His Lys Ser Ser Arg Ser Asn Ser Arg Arg Arg His Glu Ser Glu
175                   545                550                555
176 Glu Gly Asp Ser His Arg Arg His Lys His Lys Lys Ser Lys Arg
177                   560                565                570
178 Ser Lys Glu Gly Tyr Glu Ala Gly Ser Glu Pro Ala Pro Glu Gln
179                   575                580                585
180 Glu Ser Thr Glu Ala Thr Pro Ala Glu
181                   590
182 <210> SEQ ID NO: 3
183 <211> LENGTH: 417
184 <212> TYPE: PRT
185 <213> ORGANISM: Homo sapiens
W--> 186 <220> FEATURE:
187 <221> NAME/KEY: misc feature
188 <223> OTHER INFORMATION: Incyte Clone No: 1240366
W--> 189 <400> SEQUENCE:
190 Met Ser Glu Thr Gln Tyr Ser Ser Leu Thr Gln Thr Leu Ile Met
191   1               5                 10                15
```
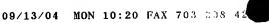
RAW SEQUENCE LISTING   DATE: 09/13/2004
PATENT APPLICATION: US/10/010,000   TIME: 10:11:15

Input Set : A:\PF-0712-USN SEQUENCE LISTINGS.txt
Output Set: N:\CRP4\09132004\J010000.raw

```
192 Thr Met Lys Leu Ser Gly Phe Gly Val Ala Asp Ser Met Arg Ile
193          20              25              30
194 Ser Gly Cys Ser Ile Gln Lys Gln Ser Arg Ile Ile Ile Thr Asp
195          35              40              45
196 Arg Gln Ala Glu Pro Pro Lys Lys Glu Ala Ala Thr Thr Gly Pro
197          50              55              60
198 Gln Val Lys Arg Ala Asp Glu Trp Lys Asp Pro Trp Arg Arg Ser
199          65              70              75
200 Lys Ser Pro Lys Lys Lys Leu Gly Val Ser Val Ser Pro Ser Arg
201          80              85              90
202 Ala Arg Arg Arg Arg Lys Thr Ser Ala Ser Ser Ala Ser Ala Ser
203          95              100             105
204 Asn Ser Ser Arg Ser Ser Ser Arg Ser Ser Ser Tyr Ser Gly Ser
205          110             115             120
206 Gly Ser Ser Arg Ser Arg Ser Arg Ser Ser Ser Tyr Ser Ser Tyr
207          125             130             135
208 Ser Ser Arg Ser Ser Arg His Ser Ser Phe Ser Gly Ser Arg Ser
209          140             145             150
210 Arg Ser Arg Ser Phe Ser Ser Ser Pro Ser Pro Ser Pro Thr Pro
211          155             160             165
212 Ser Pro His Arg Pro Ser Ile Arg Thr Lys Gly Glu Pro Ala Pro
213          170             175             180
214 Pro Pro Gly Lys Ala Gly Glu Lys Ser Val Lys Lys Pro Ala Pro
215          185             190             195
216 Pro Pro Ala Pro Pro Gln Ala Thr Lys Thr Thr Ala Pro Val Pro
217          200             205             210
218 Glu Pro Thr Lys Pro Gly Asp Pro Arg Glu Ala Arg Arg Lys Glu
219          215             220             225
220 Arg Pro Ala Arg Thr Pro Pro Arg Arg Arg Thr Leu Ser Gly Ser
221          230             235             240
222 Gly Ser Gly Ser Gly Ser Ser Tyr Ser Gly Ser Ser Ser Arg Ser
223          245             250             255
224 Arg Ser Leu Ser Val Ser Ser Val Ser Ser Val Ser Ser Ala Thr
225          260             265             270
226 Ser Ser Ser Ser Ser Ala His Ser Val Asp Ser Glu Asp Met Tyr
227          275             280             285
228 Ala Asp Leu Ala Ser Pro Val Ser Ser Ala Ser Ser Arg Ser Pro
229          290             295             300
230 Ala Pro Ala Gln Thr Arg Lys Glu Lys Gly Lys Ser Lys Lys Glu
231          305             310             315
232 Asp Gly Val Lys Glu Glu Lys Arg Lys Arg Asp Ser Ser Thr Gln
233          320             325             330
234 Pro Pro Lys Ser Ala Lys Pro Pro Ala Gly Gly Lys Ser Ser Gln
235          335             340             345
236 Gln Pro Ser Thr Pro Gln Gln Ala Pro Pro Gly Gln Pro Gln Gln
237          350             355             360
238 Gly Thr Phe Val Ala His Lys Glu Ile Lys Leu Thr Leu Leu Asn
239          365             370             375
240 Lys Ala Ala Asp Lys Gly Ser Arg Lys Arg Tyr Glu Pro Ser Asp
```

VERIFICATION SUMMARY   DATE: 09/13/2004
PATENT   PLICATION: US/10/010,000   TIME: 10:11:16

Input : A:\PF-0712-USN SEQUENCE LISTINGS.txt
Output : N:\CRF4\09132004\J010000.raw

```
L:10   M:283 W: Missing Blank Line separator, <120> field identifier
L:11   M:283 W: Missing Blank Line separator, <130> field identifier
L:12   M:283 W: Missing Blank  ine separator, <140> field identifier
L:12   M:270 C: Current Appli   ion Number differs, Replaced Current Application Number
L:13   M:271 C: Current Filing  ine differs, Replaced Current Filing Date
L:16   M:283 W: Missing Blank   ne separator, <160> field identifier
L:18   M:283 W: Missing Blank   ne separator, <210> field identifier
L:22   M:283 W: Missing Blank   ne separator, <220> field identifier
L:25   M:283 W: Missing Blank Line separator, <400> field identifier
L:98   M:283 W: Missing Blank   ne separator, <220> field identifier
L:101  M:283 W: Missing Blank   ine separator, <400> field identifier
L:186  M:283 W: Missing Blan    ine separator, <220> field identifier
L:189  M:283 W: Missing Blan    ine separator, <400> field identifier
L:250  M:283 W: Missing Blan    ine separator, <220> field identifier
L:253  M:283 W: Missing Blan    ine separator, <400> field identifier
L:288  M:283 W: Missing Blan    ine separator, <220> field identifier
L:291  M:283 W: Missing Blan    ine separator, <400> field identifier
L:382  M:283 W: Missing Blank   ine separator, <220> field identifier
L:385  M:283 W: Missing Blank   ine separator, <400> field identifier
L:411  M:283 W: Missing Blan    ne separator, <220> field identifier
L:414  M:283 W: Missing Blan    ne separator, <400> field identifier
L:445  M:283 W: Missing Blan    ine separator, <220> field identifier
L:448  M:283 W: Missing Blan    ne separator, <400> field identifier
L:537  M:283 W: Missing Blan    ne separator, <220> field identifier
L:540  M:283 W: Missing Blan    ne separator, <400> field identifier
L:605  M:283 W: Missing Blan    ne separator, <220> field identifier
L:608  M:283 W: Missing Blan    ne separator, <400> field identifier
L:651  M:283 W: Missing Blan    ine separator, <220> field identifier
L:654  M:283 W: Missing Blan    ne separator, <400> field identifier
L:677  M:283 W: Missing Blan    ne separator, <220> field identifier
L:680  M:283 W: Missing Blan    ine separator, <400> field identifier
L:716  M:283 W: Missing Blan    ne separator, <220> field identifier
L:719  M:283 W: Missing Blan    ne separator, <400> field identifier
L:764  M:283 W: Missing Blan    ne separator, <220> field identifier
L:767  M:283 W: Missing Blan    e separator, <400> field identifier
L:811  M:283 W: Missing Blan    e separator, <220> field identifier
L:814  M:283 W: Missing Blan    e separator, <400> field identifier
L:855  M:283 W: Missing Blan    e separator, <220> field identifier
L:858  M:283 W: Missing Blan    e separator, <400> field identifier
L:886  M:283 W: Missing Blan    ne separator, <220> field identifier
L:889  M:283 W: Missing Blan    ne separator, <400> field identifier
L:917  M:283 W: Missing Bla     e separator, <220> field identifier
L:920  M:283 W: Missing Blan    e separator, <400> field identifier
L:971  M:283 W: Missing Blan    ne separator, <220> field identifier
L:974  M:283 W: Missing Blan    e separator, <400> field identifier
L:991  M:283 W: Missing Blan    e separator, <220> field identifier
L:994  M:283 W: Missing Blan    e separator, <400> field identifier
L:1015 M:283 W: Missing Bl      ne separator, <220> field identifier
```

VERIFIC.. ION SUMMARY   DATE: 09/13/2004
PATENT / PLICATION: US/1 /010,000   TIME: 10:11:16

Input S.   : A:\PF-0712-USH **SEQUENCE LISTINGS.txt**
Output S :: N:\CRF4\09132)04**J010000.raw**

L:1018 M:283 W: Missing Blank Line separator, <400> field identifier
L:1064 M:283 W: Missing Blank Line separator, :220> field identifier
L:1067 M:283 W: Missing Blank Line separator, :400> field identifier
L:1102 M:283 W: Missing Blan Line separator, :220> field identifier